

“On y trouve aussi des oiseaux de différentes espèces, que l'on prend souvent à la course, et entre autres des Solitaires, qui n'ont presque point de plumes aux ailes; cet oiseau, plus gros qu'un Cygne, a la physionomie triste; apprivoisé on le voit toujours marcher à la même ligne, tant qu'il a d'espace, et retrograder de même sans s'en écarter. Lorsqu'on en fait l'ouverture, on y trouve ordinairement des Béoards, dont on fait cas, et qui sont utiles dans la médecine.”

XV.—*Reply to Sir Philip Egerton's Letter on the Tail of Diplopterus.* By FREDERICK M'COY, M.G.S. & N.H.S.D. &c.

*To the Editors of the Annals of Natural History.*

GENTLEMEN,

Cambridge, Jan. 13th, 1849.

SIR PHILIP EGERTON has written a letter in your last Number, from which it would appear that I had acted unfairly towards Prof. Agassiz in my description of the diphyccercal type of tail in the November Number of your Journal, by remarking that Agassiz called the tail of *Diplopterus* 'heterocercal,' and leaving it to be inferred that the ordinary heterocercal form was intended. Sir P. Egerton does not deny the accuracy of my description and figure of the tail of this genus and its difference from the true heterocercal type; and though no one comparing them with Agassiz's work will see any resemblance, yet Sir Philip Egerton endeavours to show that Agassiz gave the same characters that I do, by suppressing in his letter all allusions to those passages in Agassiz's writings which state without reserve that the genus was heterocercal, and by quoting a certain passage (giving a very imperfect notion of the tail however) in which the existence of rays above the spine is mentioned. I will not ask why Sir Philip Egerton only gave you the quotation from Agassiz's work as far as he did? or why he did not quote it entire? But I supply the missing line of the quotation: “*La caudale est tronquée presque verticalement, et la colonne vertébrale finit à son angle supérieure;*” and I may add to this (what Sir P. Egerton also omits to mention), that in the restored figure of the genus (tab. E), combining his latest information in the same work, Agassiz figures *Diplopterus* with a heterocercal tail *perfectly identical with that of Osteolepis figured on the same plate*, which is one of the most perfectly heterocercal fishes we know. This figure too is in accordance with the above omitted portion of the quotation, and with the prevailing theory that none but heterocercal-tailed fishes lived at those ancient periods; it shows that the quotation given by Sir P. Egerton did not imply a knowledge

on the part of Agassiz of the structure which I have pointed out in my paper; and it also shows the author's interpretation of what portion of rays are seen above the spine in fig. 1. pl. 18. of the Monog. of the Old Red Fishes, which Sir P. Egerton states to be a good representation of the structure (although he does not mention that fig. 2 of the same plate represents it as perfectly heterocercal). Will Sir Philip Egerton compare Agassiz's restored figure referred to, with mine in your Journal, and say that that is right and mine wrong? or will he say that his figure and the above portion of the quotation are not as clear definitions of the heterocercal type of tail as it is possible to give? I trust these observations will show, that whatever "unfairness" may be in this discussion is not on my side; and I may assure Sir Philip Egerton, that not for all the palæontological discoveries in the world would I misrepresent the writings of any one, much less of Prof. Agassiz, for whose brilliant talents, extensive learning, and enormous service to natural science, no one can have a more profound veneration than myself.

With regard to my "using the cancelled specific appellation *latus* when speaking of the *Coccosteus decipiens*," I must beg to refer Sir Philip Egerton to the Rules for Nomenclature published by the British Association for the Advancement of Science, for the reasons which have influenced me in retaining the original name.

I have the honour to remain, Gentlemen,

Your most obedient servant,

FREDERICK M'COY.

XVI.—*Reply to Prof. Owen's Letter on the Ganoine of some Fish-teeth.* By FREDERICK M'COY, M.G.S. & N.H.S.D. &c.

*To the Editors of the Annals of Natural History.*

GENTLEMEN,

Cambridge, Jan. 13th, 1849.

IN reference to Prof. Owen's letter in your last Number, will you favour me by the insertion of a few lines?

In your Number for August last, I published a notice of some fossil fish, and in describing the teeth used the new term "*ganoine*" to designate a peculiar modification of "*dentine*," which, from forming the hard polished surface of those teeth, had been confounded with true enamel by nearly all writers on fossil fish. To define the term, I briefly defined the tissue for which I used it, and its anatomical distinction from "*enamel*." Prof. Owen writes to point out that he had observed the distinction himself, as indeed every anatomist must who looks at a slice of tooth through a microscope; yet in the note to his letter he cites a